

DETAILED ACTION

Allowable Subject Matter

Applicant has amended the independent claim 9 to overcome the prior art rejection of the previous office action. Claims 9-11 and 20 are allowed. The following is an examiner's statement of reasons for allowance:

Reference Yamazaki et al. (US 6,365,933) do not disclose:

- An electric field substantially across the polycrystalline silicon between the metal electrodes (Yamazaki et al. disclose the electric field is applied to source and drain regions after the device is formed).
- The polycrystalline silicon film is formed by crystallizing an amorphous silicon film containing nickel metal by a terminal treatment in a temperature of 400 to 500°C and due to the electric field.

References Miyanaga et al. (US 5,932,893) and Fonash et al. (US 5,994,164) do not disclose:

- Electrical conductivity activation energy between 0.53 and 0.71 eV.
- An electric field substantially across the polycrystalline silicon between the metal electrodes.
- The polycrystalline silicon film is formed by crystallizing an amorphous silicon film containing nickel metal by a terminal treatment in a temperature of 400 to 500°C and due to the electric field.

Therefore, the above references do not disclose the claimed invention of present application and claims 9-11 and 20 are allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wai-Sing Louie whose telephone number is 571-272-1709. The examiner can normally be reached on 7:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on 571-272-1705. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Wai-Sing Louie/
Primary Examiner, Art Unit 2814

Wsl
October 25, 2007.